## **AMENDMENTS TO THE CLAIMS**

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- 1. (Currently amended) A process for preparing 3-pentenenitrile by hydrocyanating 1,3-butadiene with hydrogen cyanide over at least one catalyst, which comprises the process comprising contacting 1,3-butadiene with at least one microporous solid before the reaction, freeing, and releasing the 1,3-butadiene of from the at least one microporous solid before the hydrocyanation; with the at least one catalyst and regenerating the at least one microporous solid which has been freed of had been contacted with 1,3-butadiene and/or or hydrogen cyanide by heating under reduced pressure in an atmosphere which is formed by comprising one or more gases selected from the group consisting of noble gases, air and nitrogen.
- 2. (Currently amended) The process according to claim 1, wherein 1,3-butadiene and further comprising contacting hydrogen cyanide are contacted together with or separately from the 1,3-butadiene with the at least one microporous solid.
- 3. (Currently amended) The process according to either of claims 1 or 2 claim 1, wherein 1,3-butadiene and/or hydrogen cyanide are contacted with the at least one microporous solid in includes tubes having beds, and the flow conditions of 1,3-butadiene and/or hydrogen cyanide are selected in such a way that to provide plug flow characteristics are generated over the at least one microporous solid.
- 4. (Currently amended) A process for preparing 3-pentenenitrile by hydrocyanating 1,3-butadiene with hydrogen cyanide over at least one catalyst, which comprises effecting the hydrocyanation in the presence of at least one microporous solid.
- 5. (Currently amended) The process according to claim 4, wherein, after the hydrocyanation, further comprising regenerating the at least one microporous solid is regenerated by heating under reduced pressure in an atmosphere which is formed by comprising one or more gases starting from the group consisting of noble gases, air and nitrogen.
- 6. (Currently amended) The process according to any of claims 1 to 5 claim 1, wherein the 1,3-butadiene has a content of acetylene which is less than 1000 ppm.
  - 7. (Currently amended) The process according to any of claims 1 to 6 claim 1, wherein

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the at least one microporous solid is selected from the group consisting of aluminas and molecular sieves and has a pore size of from 0.01 to 20 mm.

- 8. (Currently amended) The process according to any of claims 1 to 7 claim 1, wherein the microporous shaped body solid has a porosity which is between 0 and 80% based on the particle volume.
- 9. (Currently amended) The process according to any of claims 1 to 8 claim 1, wherein the microporous shaped body is used solid is in extrudate form, in round form or in undefined form as a result of fracturing.
- 10. (New) The process according to claim 2, wherein the at least one microporous solid includes tubes having beds, and the flow conditions of the hydrogen cyanide are selected in such a way to provide flow characteristics.
- 11. (New) The process according to claim 4, wherein the 1,3-butadiene has a content of acetylene which is less than 1000 ppm.
- 12. (New) The process according to claim 4, wherein the at least one microporous solid is selected from the group consisting of aluminas and molecular sieves and has a pore size of from 0.01 to 20 mm.
- 13. (New) A process for preparing 3-pentenenitrile by hydrocyanating
  1,3-butadiene with hydrogen cyanide over at least one catalyst, the process comprising:
  contacting at least one microporous solid with the 1,3-butadiene and hydrogen cyanide;
  directing the the 1,3-butadiene and the hydrogen cyanide that had contacted the at least
  one microporous solid to a hydrocyanation reaction system; and

regenerating the at least one microporous solid that had been contacted with the 1,3-butadiene and hydrogen cyanide by heating under reduced pressure in an atmosphere comprising one or more gases selected from the group consisting of noble gases, air and nitrogen.

14. (New) The process according to claim 13, wherein the at least one microporous solid includes tubes having beds, and the flow conditions of 1,3-butadiene and hydrogen cyanide are selected to provide plug flow characteristics over the at least one microporous solid.

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15. (New) The process according to claim 13 wherein the 1,3-butadiene has a content of acetylene which is less than 1000 ppm.

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- 16. (New) The process according to claim 13 wherein the at least one microporous solid is selected from the group consisting of aluminas and molecular sieves and has a pore size of from 0.01 to 20 mm.
- 17. (New) The process according to claim 16 wherein the microporous solid has a porosity which is between 0 and 80% based on the particle volume.

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